

# Arizona Department of Education Accountability System

## A-F Model Recommendations: Adjustments to Traditional Model and Parallel Models

State Board of Education

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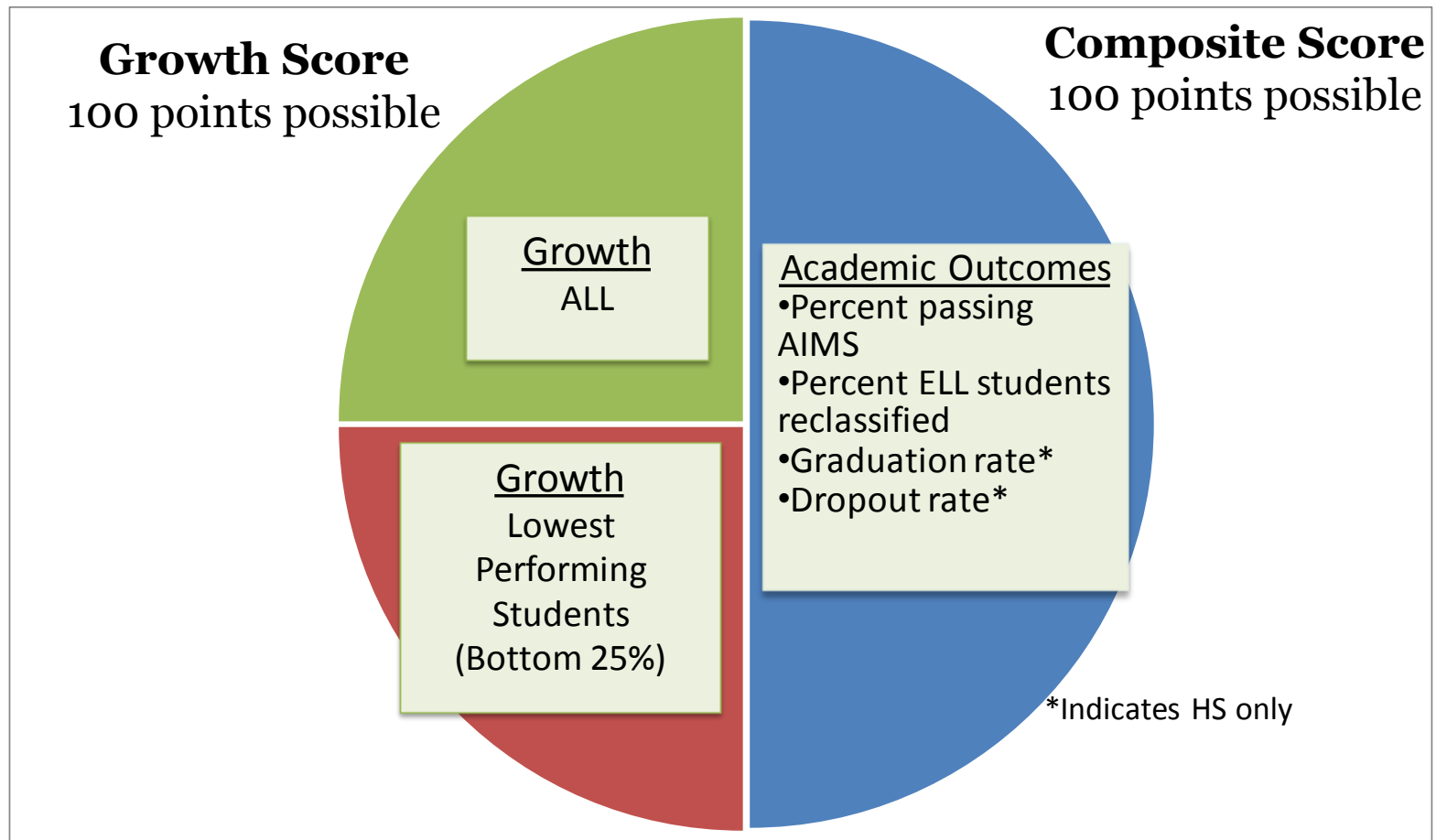


# Outline for Today's Presentation

- Overview of Current A-F Letter Grade Model
- Review of Proposed Technical Refinements to the A-F Letter Grade - Traditional Model
  - Additional Growth Point
  - ELL Reclassification Criteria
  - AIMS A
  - 95% Tested on AIMS
- Proposed Parallel A-F Models
  - K-2 Schools
  - Small Schools
  - Alternative Schools
- Proposed 100 Point Scale
  - Small & Alternative Schools

All recommendations were vetted through our Accountability Advisory Group (AAG), various stakeholders and ADE Divisions for special topics, and the State Board Sub-Committee

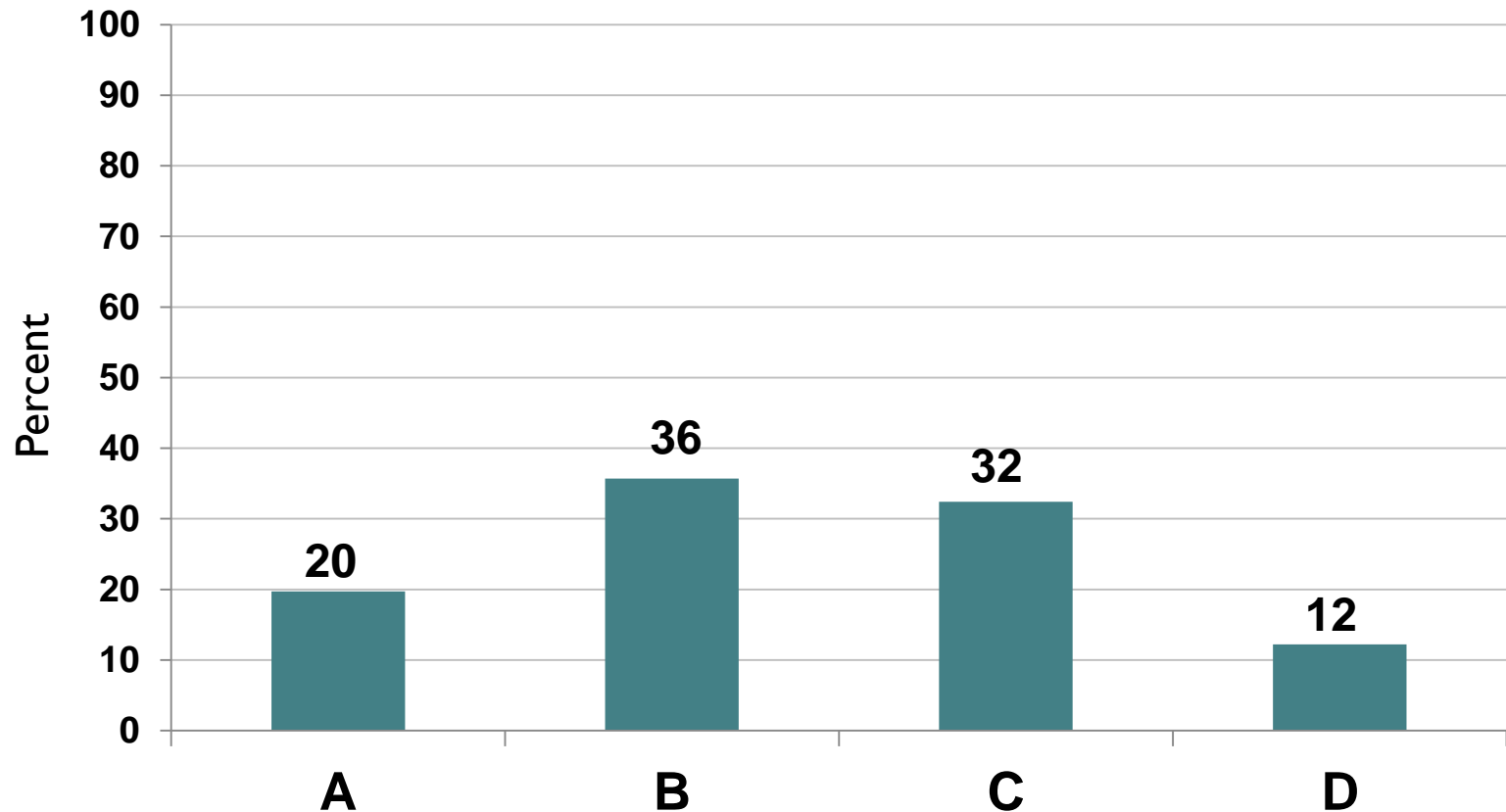
# Components of the A-F Letter Grades, 2011



$$\begin{array}{l} \text{Composite Score} \\ \text{( 100 points possible )} \end{array} + \begin{array}{l} \text{Growth Score} \\ \text{( 100 points possible )} \end{array} = \text{A-F Letter Grade} \\ \text{( 200 points possible )}$$

# School A-F Letter Grade Distribution - Statewide, 2011

1501 schools received A-F Letter Grades in 2011



Refinements

# **TRADITIONAL A-F MODEL**

Additional Growth Point

ELL Reclassification Criteria

AIMS A

95% Tested for AIMS



# **ADDITIONAL GROWTH POINT**

# Additional Growth Point

## **Additional Point in the Growth Component of the model**

- Currently, the model is set up so that a school and LEA can earn up to 100 points in the Growth portion and an additional 100 points on the Composite side of the model.
- In reality, the maximum number of points a school/LEA may earn on the *growth* portion is only 99 thus making the total points possible 199 rather than 200.
  - Percentile ranks range from 1-99



# Additional Growth Point – Recommendation

## **Additional Growth Point**

- In order to equate the two sides of the model, we recommend starting the growth measure at 1 giving schools the opportunity to reach a total of 100 points for the growth portion of the A-F Letter Grade model.



# Additional Growth Point – Impact Data

2011	A-F Letter Grade		Grade with Additional Point	
Grade	Frequency	Percent	Frequency	Percent
A	295	20	316	21
B	536	36	554	37
C	487	32	460	31
D	183	12	171	11
Total	1501	100	1501	100

72 School letter grades  
changed to a higher grade

Change in Grade	Frequency
B → A	21
C → B	39
D → C	12

# Additional Growth Point – Impact Data

## Schools (1501)

72 School A-F Letter Grades  
changed to a higher grade

Change in Grade	Frequency
B → A	21
C → B	39
D → C	12

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## LEAs (373)

21 LEA A-F Letter Grades  
changed to a higher grade

Change in Grade	Frequency
B → A	11
C → B	7
D → C	3



# **ELL RECLASSIFICATION CRITERIA**

# ELL Reclassification - 2011

## ELL Reclassification Rates

- Current model allows schools/LEAs to earn 3 additional points in the Composite portion of the model if the percentage of English Language Learner (ELL) students reclassified as proficient during the year across all grades served is **greater than or equal to 30%**

## 2011 Criteria

1. Only groups of 16 or more ELL students are included in the calculation
2. Students included in this analysis were those identified as continuing English language learners (ELL)
3. Continuously enrolled in the ELL program within the school for at least 150 calendar days

# ELL Reclassification - Recommendation

## Criteria

- School wide *n* count of equal to or greater than 10 ELL students
- Must have 95% tested on AZELLA end-of-year testing
  - All ELL students (SEI, ILLP, Bi-Lingual, Parent Withdrawn)
- 30% Reclassification of FAY ELL students

# ELL Reclassification - Impact Data

Of all schools with ELL students in 2011, approximately 506 schools (35%) would earn the 3 additional points in the Composite portion of the model under the proposed ELL criteria



# AIMS A

# Inclusion of AIMS A Results

## **AIMS A Results**

- State Statute (ARS 15-241) mandates that all students shall be included in the statewide accountability system
- Historically, AIMS A students have been excluded from state accountability models



# AIMS A – Number of Schools

	Math	Reading
	2011	2011
Schools with Students Taking AIMS A	905	905
Type		
Elementary	728	728
High School	158	159
K-12	12	12
Alternative	6	6
Charter	47	47

# AIMS A – Number of Students

	Math	Reading
Statewide	2011	2011
Number of Students Tested on AIMS A	5637	5446
Range of Students per School	1 - 89	1 - 89
Schools with 10 or less AIMS A	85.4%	85.5%
Average Number Students per School	6.22	6.22
Number of Students Proficient on AIMS A	3962	4033
Percent Proficient - Statewide	70%	74%

# AIMS A - Recommendation

## AIMS A Results

- We recommend including Students demonstrating proficiency on the AIMS A in the school wide calculation of the percentage of students passing in the current academic year for the Composite portion of the model
- The 1% cap on the number of AIMS A scores counted toward proficiency will be enforced at the LEA level when calculating the LEA A-F Letter Grades to stay consistent with federal guidelines



**95% TESTED ON AIMS**

# 95% Tested for AIMS

- Annual Yearly Progress (AYP) determinations are no longer required by the U.S. Department of Education except for the Annual Measureable Objectives (AMOs) component.
- One important component no longer required is the 95% requirement
- State Statute (A.R.S. §15-755) requires schools to test all students

# 95% Tested for AIMS

## Option 1: Cap on Points Eligible

Percentage of Students Tested	Maximum Letter Grade Allowed	Eligible Points
95% or higher	A	200+
85-94%	B	139
75-84%	C	119
Less than 75%	D	99

## Option 2: Reduced by 10 Points

Any school testing less than 95% of its students has total A-F Letter Grade points reduced by 10 points

# 95% Tested for AIMS – Impact Data

## Option 1: Cap on Points Eligible

Of the 1,501 schools earning letter grades in 2011,

**16** schools tested less than 95% of their students

- 15 would see no change in their letter grade and
- 1 school would have their letter grades decreased.

Letter Grade Change	2011 only
No change	15
A to B	0
B to C	1
C to D	0

# 95% Tested for AIMS – Impact Data

## Option 2 - Reduced by 10pts

Of the 1,501 schools earning letter grades in 2011, **16** schools tested less than 95% of their students.

- 10 would see no change in their letter grade and
- 6 schools would have their letter grades lowered

Letter Grade Change	2011 only
No change	10
A to B	0
B to C	4
C to D	2



# **A-F LETTER GRADE PARALLEL MODELS**

K-2 Schools

Small Schools

Alternative School

Parallel Model



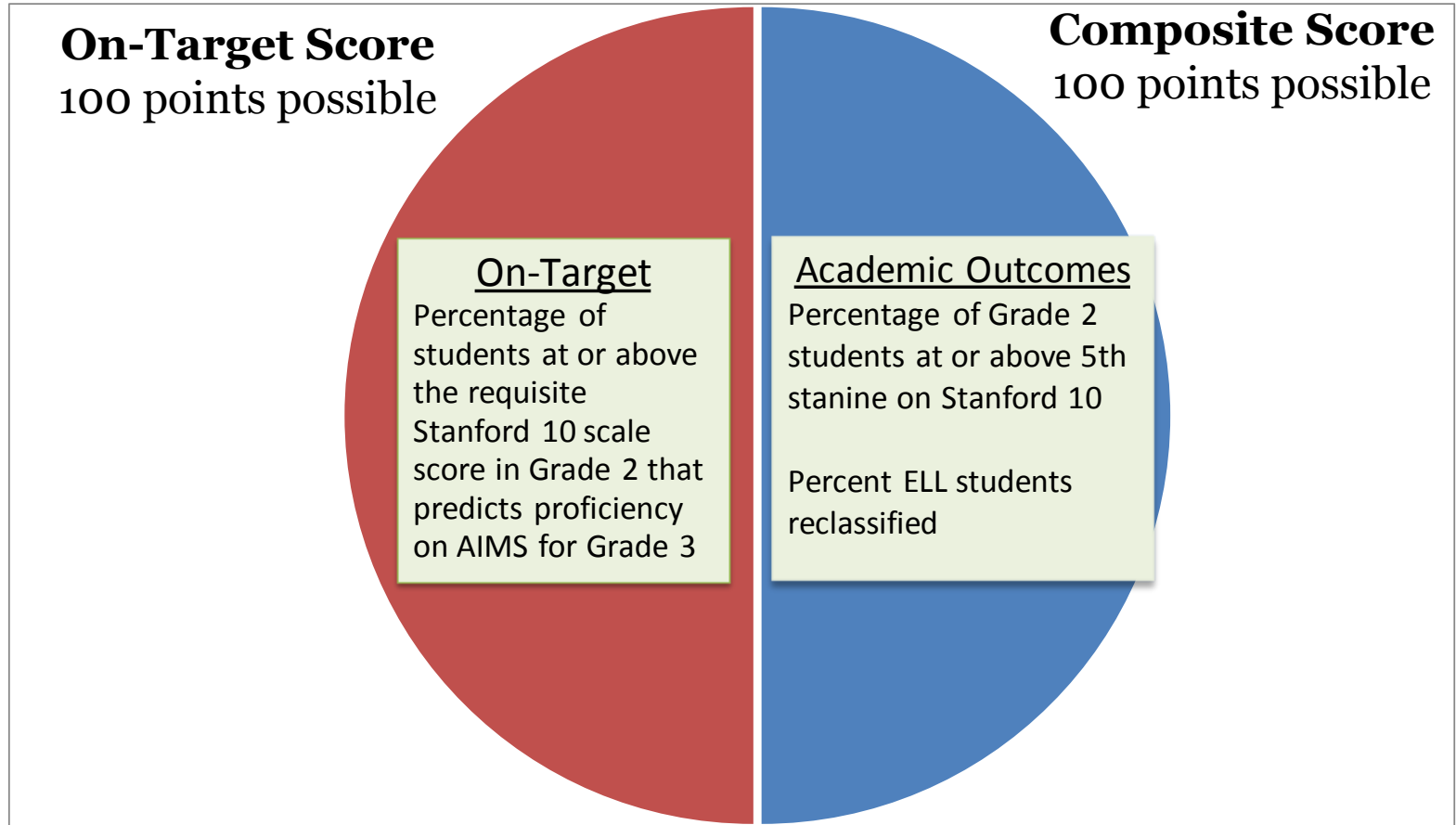
# **K-2 SCHOOLS MODEL**

# K-2 Schools

## Summary Statistics

- There are 82,016 Grade 2 students statewide
- Approximately 1,441 students are enrolled in eleven K-2 schools statewide
- AIMS is not administered in KG – Grade 2
- Nationally norm-referenced Stanford 10 test is administered to all Grade 2 students

# Proposed K-2 Schools Model



$$\begin{array}{l} \text{Composite Score} + \text{On-Target Score} = \text{A-F Letter Grade} \\ (100 \text{ points possible}) + (100 \text{ points possible}) = 200 \text{ points possible} \end{array}$$

# K-2 Schools– Composite

## Percent Passing

- Norm-referenced Stanford 10 test used to determine the percentage of students passing in the current academic year
- A student is defined as ‘passing’ if he or she scores at or above the 5<sup>th</sup> stanine in the current year
- The percentage of students ‘passing’ is rounded up to the nearest whole number and is equal to the total number of composite points for a school
- Reading and Mathematics are calculated separately and then the points are averaged for an overall composite rating for the school (0-100 points)

# K- 2 schools – ELL Impact Data

## ELL Reclassification Points

- 8 out of the eleven K-2 Schools were eligible for ELL Points based on the n-count of 10; 5 out of the 8 received the 3 points.

Number of K-2 Schools with ELL students in 2011	Number of Schools with Equal or Greater than 10 ELL Students	Recent Reclassifying equal to or greater than 30%	Number of Schools Receiving ELL Points
10	8	5	5

# K-2 Schools – On-Target

The proposed model includes a measure that indicates the degree to which students in Grade 2 are **on-track** to grade-level proficiency on AIMS Reading and Mathematics in Grade 3

*“Which scale score on Stanford 10 Grade 2 Reading and Mathematics best predicts proficiency on AIMS Grade 3 Reading and Mathematics?”*

1. The 2010 Stanford 10 Grade 2 scores were regressed on their 2011 Grade 3 AIMS scores to create a predictor model establishing a benchmark on Stanford 10 Grade 2
2. As a result, on-track benchmarks were established as:
  - **577 scale score on the Stanford 10 Mathematics assessment**
  - **580 scale score on the Stanford 10 Reading assessment**
3. For each K-2 school, the percentage of students at or above the benchmarks Grade 2 is calculated
4. Reading and Mathematics percentages were averaged and equal to a total point value between 0-100 points for schools

# K-2 Schools

## Calculating final A-F Letter Grade

- The total points a K-2 school can earn is calculated by adding the composite points and the growth points together.
- The total number of points possible ranges between 0-200 points
- The final grade for a K-2 school is determined by comparing the total points to the following letter grade scale

**A = 140-200**

**B = 120-139**

**C = 100-119**

**D = 0-99**



# K-2 Schools – Impact Data

Letter Grade	Frequency	Percent
A	4	36
B	2	18
C	3	27
D	2	18

# K-2 Schools – Impact Data

<b>K-2 Schools</b>	<b>Stanford 10 Pass Points</b>	<b>ELL Points</b>	<b>Composite Points</b>	<b>Growth Target Points</b>	<b>Total Points</b>	<b>Letter Grade</b>
<b>1</b>	59	3	<b>62</b>	<b>64</b>	<b>126</b>	<b>B</b>
<b>2</b>	75	0	<b>75</b>	<b>79</b>	<b>154</b>	<b>A</b>
<b>3</b>	56	0	<b>56</b>	<b>52</b>	<b>108</b>	<b>C</b>
<b>4</b>	78	0	<b>78</b>	<b>77</b>	<b>155</b>	<b>A</b>
<b>5</b>	59	3	<b>62</b>	<b>83</b>	<b>145</b>	<b>A</b>
<b>6</b>	31	3	<b>34</b>	<b>50</b>	<b>84</b>	<b>D</b>
<b>7</b>	56	0	<b>56</b>	<b>63</b>	<b>119</b>	<b>C</b>
<b>8</b>	28	3	<b>31</b>	<b>63</b>	<b>94</b>	<b>D</b>
<b>9</b>	61	3	<b>64</b>	<b>76</b>	<b>140</b>	<b>A</b>
<b>10</b>	49	0	<b>49</b>	<b>61</b>	<b>110</b>	<b>C</b>
<b>11</b>	66	0	<b>66</b>	<b>71</b>	<b>137</b>	<b>B</b>

# K-2 Schools

## Bottom 25%

- It is recommended that a bottom 25% calculation for K-2 schools not be included as part of the parallel K-2 model due to the lack of prior year data.

Parallel Model



# **SMALL SCHOOLS MODEL**

# Small Schools – Student Population

## **Proposed Definition:**

- 100 or fewer students enrolled on the first day of AIMS testing window (i.e., the Elementary testing window schedule) in the current school year
  - This is to capture the majority of students across all grades tested as late in the school year as possible
  - This definition will also apply to high schools

# Small Schools – Student Population

## Summary Statistics

- 214 schools serving approximately 11,385 students
  - This excludes 73 schools that are both small and alternative
- 98 are located in rural areas
- 116 are located in urban areas
- 134 small schools are charter schools

Total Enrollment	Number of Schools	Percent	Cumulative Percent
1-10	10	5	5
11-20	13	6	11
21-30	27	12	23
31- 50	42	20	43
51-75	73	34	77
76-100	49	23	100
Total	214	100	

# Proposed Small Schools Model

**Growth Score**  
100 points possible

## Growth

ALL Students  
Pooled 3-Year  
Median SGP

## Bottom 25%

Pooled 3-Year  
Median SGP

**Composite Score**  
100 points possible

## Academic Outcomes

- Percent Passing  
    >AIMS & AIMS A  
    >Pooled 3 Year Average
- ELL Reclassification
- Graduation Rate\*
- Dropout Rate\*

\*Indicates HS only

**Composite Score + Growth Score = A-F Letter Grade**  
**( 100 points possible ) + ( 100 points possible ) = 200 points possible**

# Small Schools – Composite

- Percent Passing – Pooled 3-Year Average
  - Grades 3-8 & 10
    - AIMS and AIMS A test scores
  - Grades 11 & 12
    - Better of Fall or Spring AIMS test score from AIMS



# Small Schools – Impact Data

- Percent Passing

Descriptive Statistics for Small Schools	Min	Max	Mean	Std. Deviation
Pooled 2-yr* Percent Passing - Reading	0	100	0.61	0.2398
Pooled 2-yr Percent Passing - Math	0	100	0.39	0.2529
<b>Overall 2-yr Avg. Percent Passing</b>	<b>0</b>	<b>100</b>	<b>0.50</b>	<b>0.2310</b>
<b>Pass Points</b>	<b>0</b>	<b>100</b>	<b>50</b>	

\* Please note: Because of the change in AIMS Mathematics test in 2010 the impact data is based on two years of data as opposed to the three year data we are proposing for this model.

# Small Schools – Impact Data

## ELL Reclassification Rates – (0 or 3 pts)

- Same criteria as Tradition A-F Letter Grade Model

<b>Number of Small Schools with ELL students in 2011</b>	<b>Percent Meeting 95% Tested Rule (number)</b>	<b>Recent Reclassifying equal to or greater than 30% (number)</b>	<b>Percentage of Schools Receiving ELL Points (number)</b>
68	72% (49)	9% (6)	4% (3)

# Small Schools – Impact Data

- Graduation Rates – (0 or 3 pts)
  - Same criteria as Tradition A-F Letter Grade Model
- Dropout Rates – (0 or 3 pts)
  - Same criteria as Tradition A-F Letter Grade Model

Small Schools Earning Dropout/Grad Rate Points	Number of Schools	
Graduation Rate Points	40	30
Dropout Rate Points	61	

# Small Schools – Growth

- Growth – All Students
  - Pooled 3-Year Median Growth Percentile
- Growth – Bottom 25%
  - Pooled 3-Year Median Growth Percentile
- The growth component will be bound by I

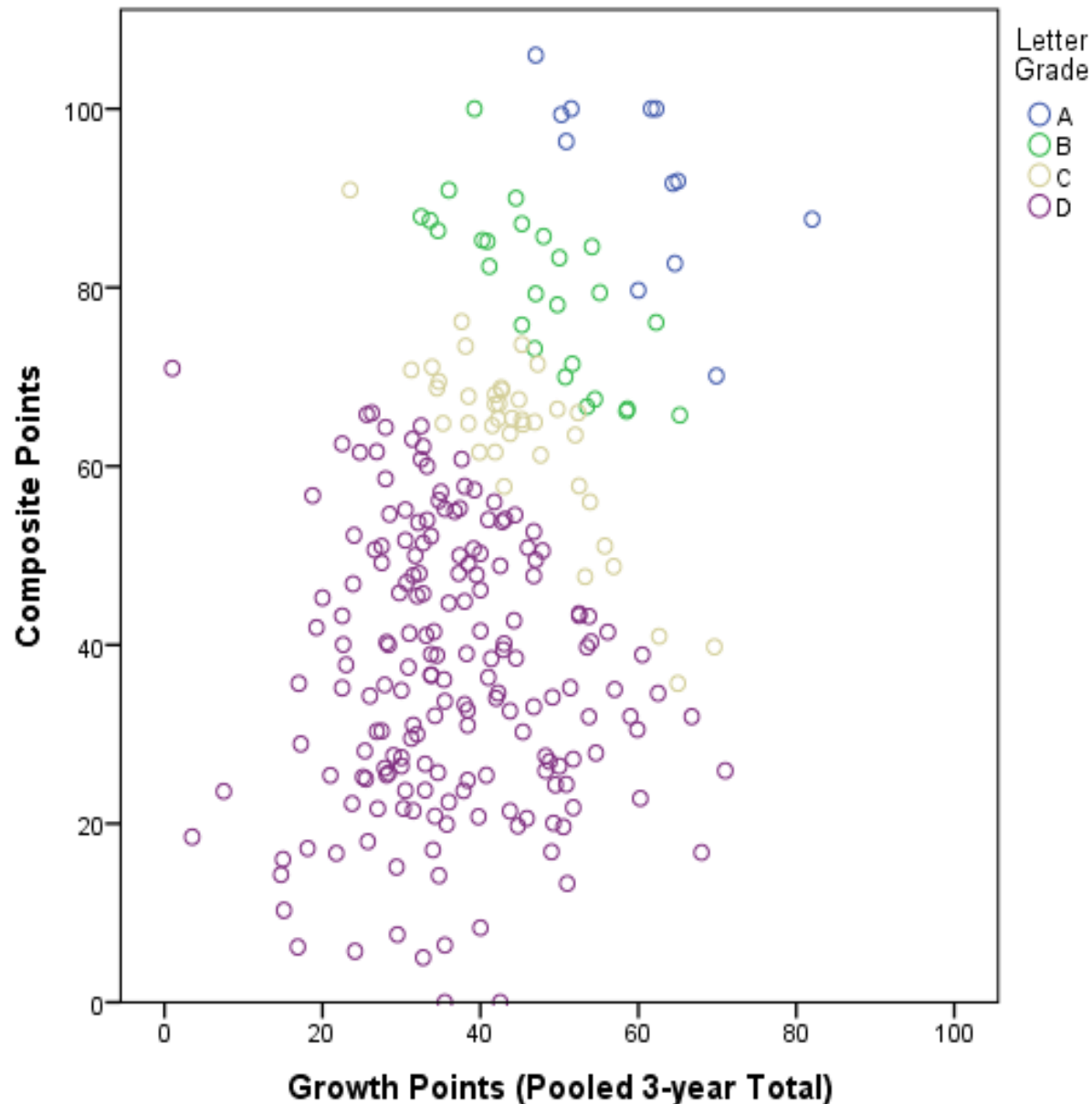
Statewide Small Schools Median	Mean	Std. Deviation
Median Growth of Math & Reading – All students	43	11.6
Median Growth of Math & Reading - Bottom 25%	37	18.4
Total Growth Points	40	12.7

# Small Schools – Impact Data

Descriptive Statistics for Small Schools	Minimum	Maximum	Mean	Std. Deviation
Total Composite Points	0	106	52	22.8
Total Growth Points	1	82	40	12.5
<b>Total Points (Composite + Growth)</b>	<b>25</b>	<b>170</b>	<b>92</b>	<b>28.6</b>

\* Please note: Because of the change in AIMS Mathematics test in 2010 the impact data is based on two years of data as opposed to the three year data we are proposing for this model.

# Small Schools – Impact Data



# Small Schools – Impact Data

## Distribution of A-F Letter Grades for Small Schools

- Same A-F Letter Grade scale as traditional model (0-200 pts)

Letter Grade	Frequency	Percent
A	11	5.6
B	26	13.2
C	36	18.3
D	124	62.9

Note: A small number of schools (n=17) were missing test records and/or growth data and were excluded from the impact data provided here.

Parallel Model



# **ALTERNATIVE SCHOOLS MODEL**



# Alternative Schools

## Definition & Criteria

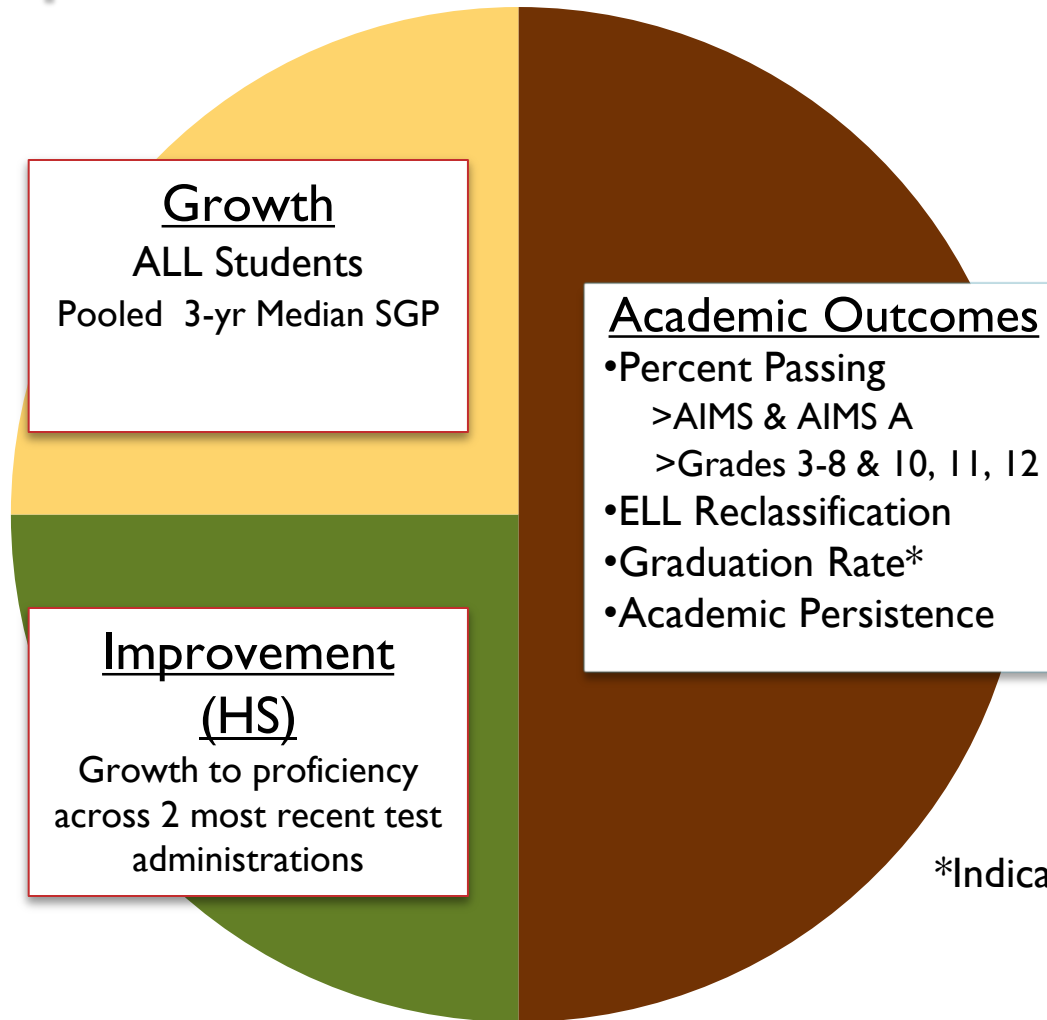
- Schools apply to ADE for Alternative School Status
- A school's educational program and support services must match its stated mission
- Must serve:
  - Students with behavioral issues (documented history of disruptive behavior)
  - Students identified as dropouts
  - Students in poor academic standing who are either severely behind on academic credits (more than one year) or have demonstrated a pattern of failing grades
  - Pregnant and/or parenting students
  - Adjudicated youth

# Composition of Alternative Schools

## Descriptive Summary

- 151 open and in operation (87% serve HS students)
- Average number of students 168
- Percent Special Education - 16%
- Percent eligible for Free/Reduced Lunch - 46%
- 38 schools are located in rural settings/113 are located in an urban setting
- 93 of the Alternative schools are charter schools
- Average Dropout Rate - 15%
- 5-yr Grad Rate from 2009- 2010 School Year = 40%
- 3-yr average = 38%

# Proposed Alternative School Model



\*Indicates HS only

# Alternative Schools Model - Composite

## **Percent Passing – (100 pts)**

- **Grades 3-8 & 10**
  - AIMS and AIMS A test scores included
- **Grades 11 & 12**
  - Better of Fall or Spring AIMS test score in current school year

# Alternative Schools – Impact Data

## Percent Passing

Percent Passing Points Descriptive Statistics				
	Minimum	Maximum	Mean	Standard Deviation
Percent Passing Points	0.00	100.00	28.10	14.30

# Alternative Schools – Impact Data

## ELL Reclassification

Alternative Schools Earning ELL Reclassification Points		
	Frequency	Percent
<b>Total Alternative Schools</b>	151	100
<b>Schools serving ELL students</b>	57	38
<b>Schools earning points</b>	1	2

# Alternative Schools - Composite

## Graduation Rate – (0 or 3 pts)

- One half of a standard deviation above the Alternative Schools' statewide average graduation rates

Criteria for Grad Rate bonus points are earned in one of three ways		
Graduation Rates	In order to meet the Target	Points Earned
3-Year Avg. for 5-Yr Grad Rate	$\geq 48\%$	3
Current Year 5-Yr Grad Rate $\geq 52\%$	1% Increase	3
Current Year 5-Yr Grad Rate $< 52\%$	2% Increase	3

Note: In 2012, the Baseline Year will be 2006 or the school's first year serving grade 12, whichever is the latest.

# Alternative Schools – Impact Data

## Graduation Rates

Alternative Schools Earning Graduation Rate Bonus Points		
	Frequency	Percent
Schools earning points	86	57
Schools not earning points	65	43
Total	151	100



# Alternative Schools Model - Composite

## Academic Persistence (0 or 3 pts)

- A proxy for an effective Alternative School and an indicator of school quality
- Incentivizes Alternative schools to keep students engaged in a school setting across years
- School would have to meet a 70% threshold (72% is the statewide Alternative School average)
  
- An academically persistent student are those who:
  - Return (or re-enroll) to the *same* school or
  - Enrolls in another alternative school or
  - Returns to a traditional school

# Alternative Schools – Impact Data

- Academic Persistence

Alternative Schools Earning Persistence Points		
	Frequency	Percent
Schools earning points*	87	57
Schools not earning points	64	43
Total	151	100

\*This impact data based on the original recommendation of reenrolled at the *same* school, 2) reenrolled in another alternative school within the same LEA or 3) those returning to a traditional school within the same LEA at the beginning of following school year after enrollment in an alternative school in the same LEA.

# Alternative Schools – Growth

## Growth – All Students

- Pooled 3-Year Median Growth Percentile (SGP)
- Grades 3-8 & 10

## Improvement (HS only)

- Credits Alternative Schools' work with high school students to reach proficiency by Grade 12
- Students in Grades 10, 11, 12 must have test scores in the two most recent test administrations from the same school
  - Spring AIMS 2010 to Fall AIMS 2011 (Across School Years)
  - Fall AIMS 2011 to Spring AIMS 2012 (Within Same School Year)

# Alternative Schools – Impact Data

- Growth – All Students

Alternative Schools Median SGP for Reading and Mathematics				
	Min	Max	Mean	Standard Deviation
<b>3-yr Pooled Median SGP - Reading &amp; Mathematics</b>	3.50	71	37.24	9.26

# Alternative Schools – Impact Data

- Improvement (HS only)

Alternative Schools School Improvement Rate				
	Min	Max	Mean	Standard Deviation
School Improvement Rate	3.45	66.67	15.90	8.04

The percentage improvement from Fall-to-Spring and Spring-to-Fall are averaged together and equal to a total point value between 0 and 100. The percentage represents the average percentage of students who improved to proficiency across each of the two most recent test administrations.

# Alternative Schools

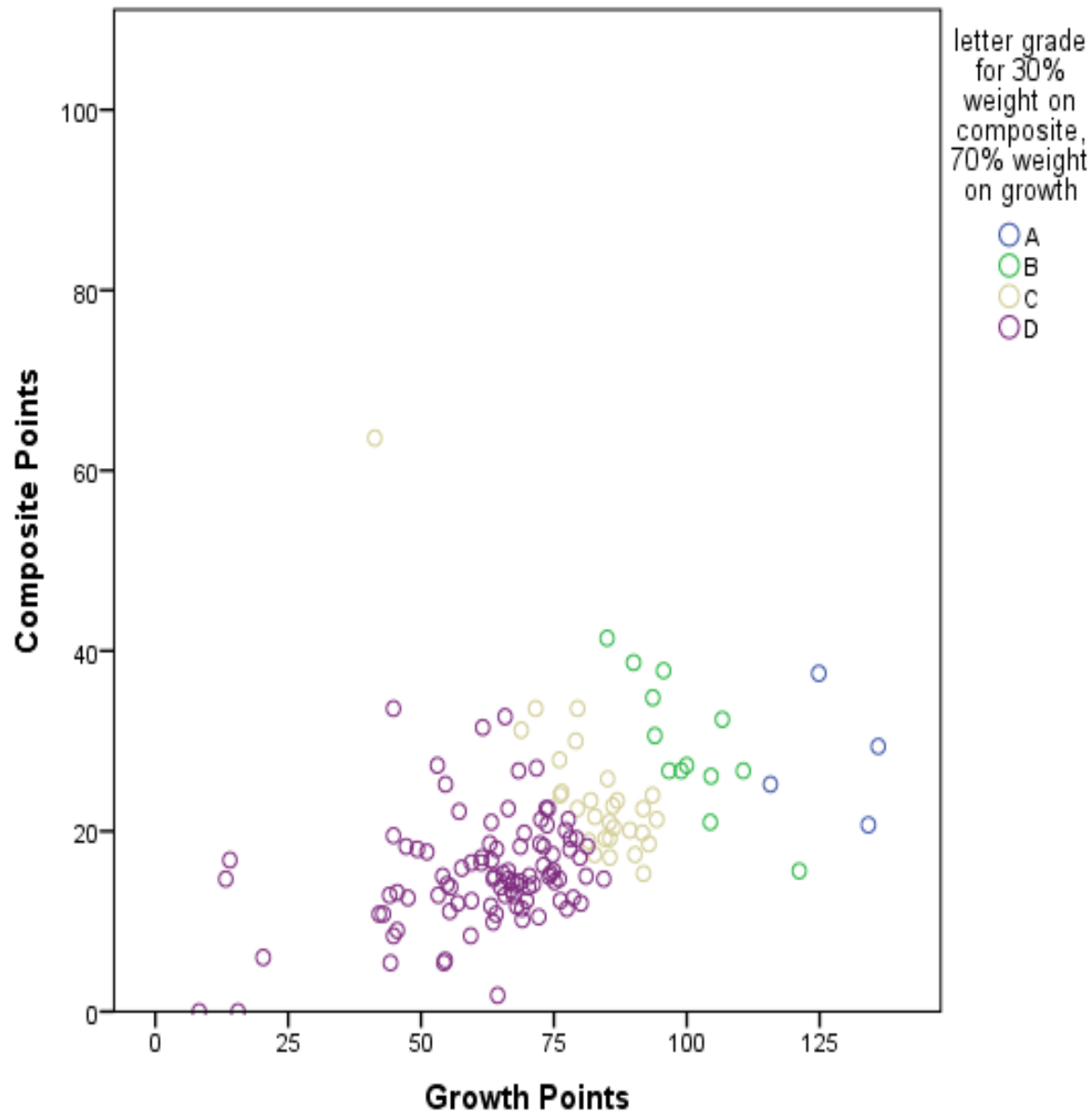
## Bottom 25%

- We recommend *not* including the bottom 25% of a school/LEA's lowest achieving students in the proposed alternative school model

# Alternative Schools – Weighting Options

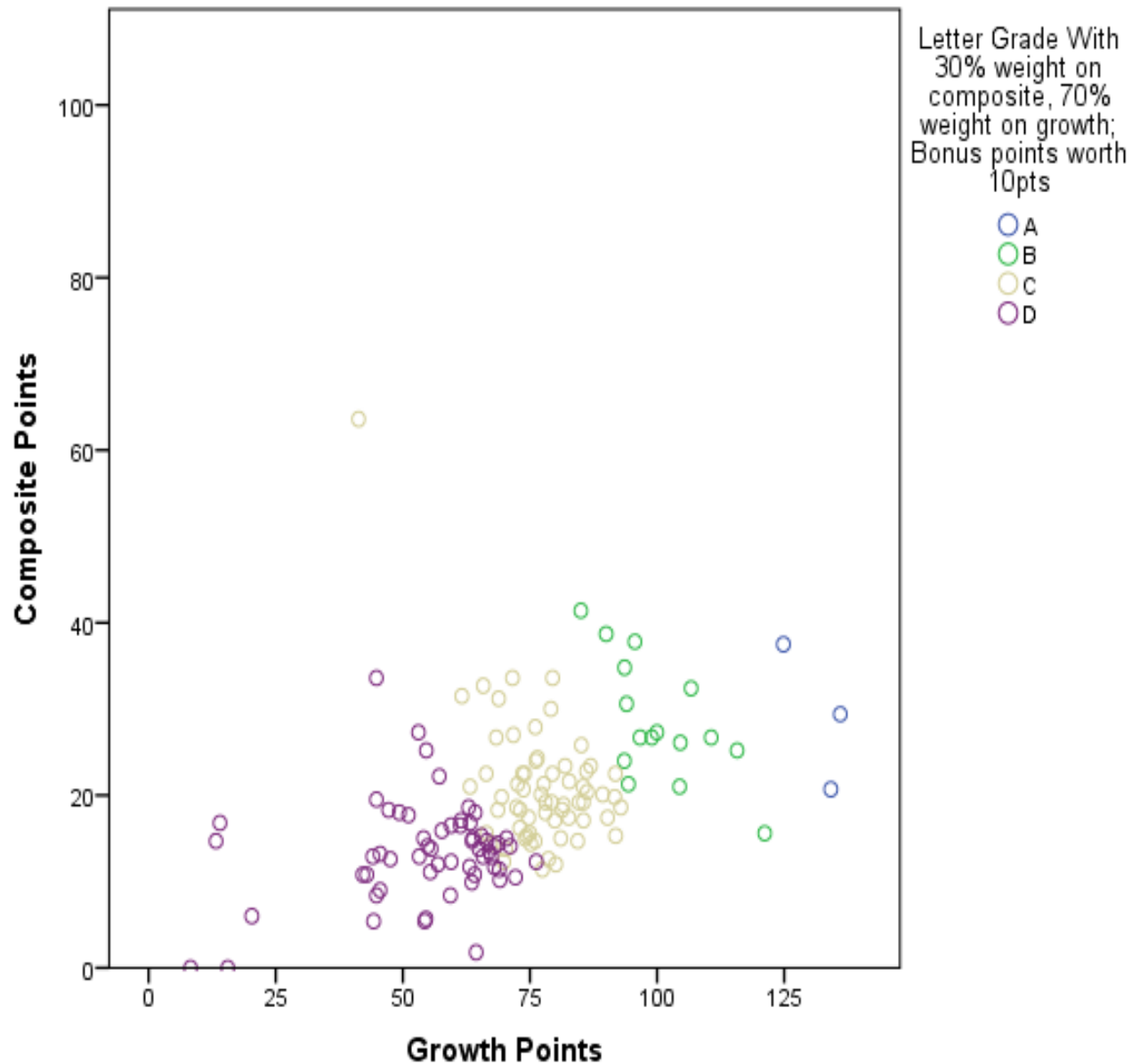
Distribution of Alternative School Grades with Differing Weighting Procedures				
	50% composite 50% growth		30% composite 70% growth	
	Frequency	Percent	Frequency	Percent
<b>A-ALT</b>	2	1	4	3
<b>B-ALT</b>	9	6	13	9
<b>C-ALT</b>	18	12	29	19
<b>D-ALT</b>	122	81	105	70
<b>Total</b>	151	100	151	100

# Alternative Schools – Impact Data

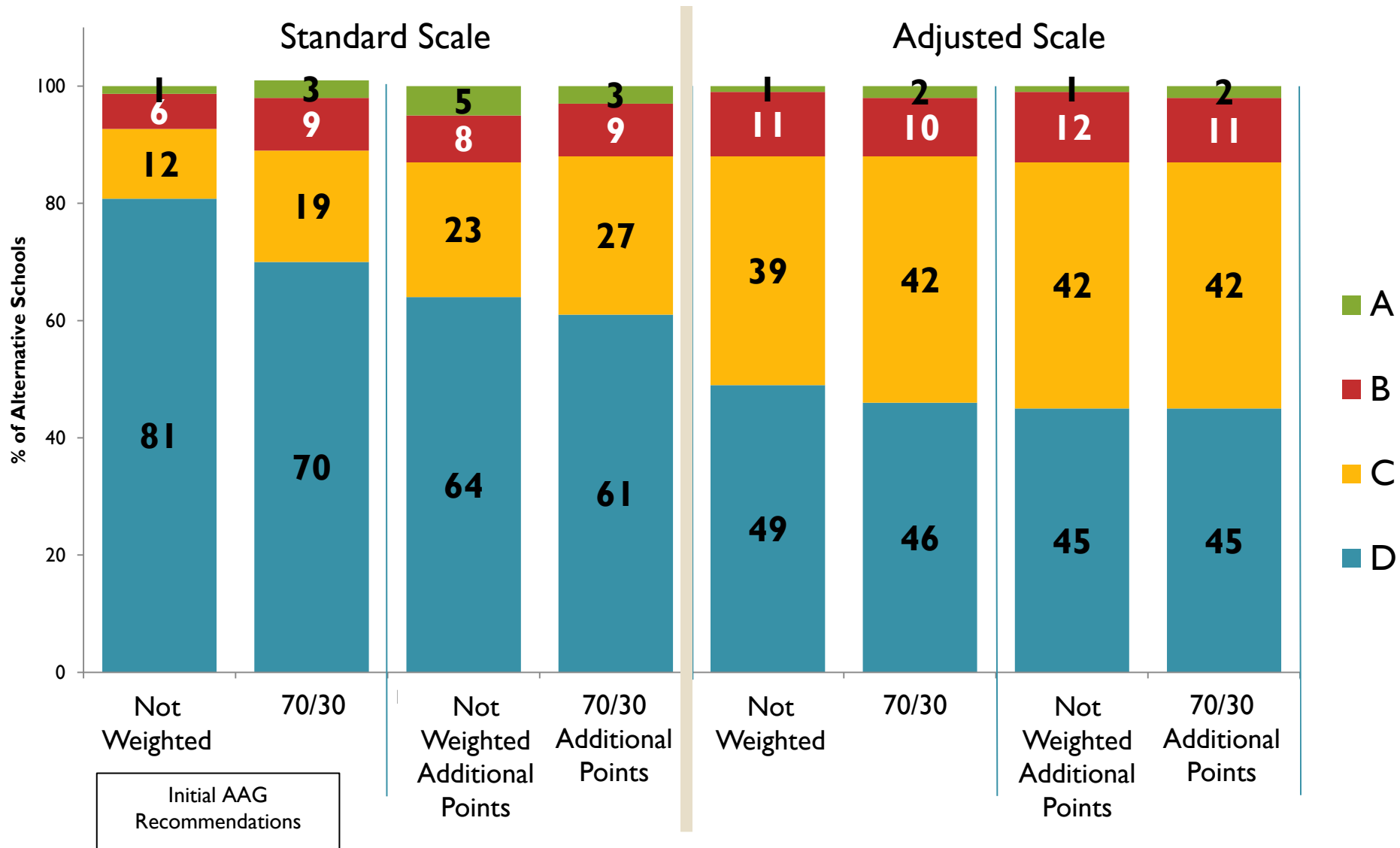




# Alternative Schools – Additional Points



# Alternative Schools – Weighting & Additional Points



First and Second Year Schools

# **SMALL & ALTERNATIVE SCHOOLS**

# Small and Alternative Schools

- Original recommendation was to use this scale for Alternative Schools that may not have growth indicators for their students
- The Board Sub-Committee recommended using this scale for 1<sup>st</sup> and 2<sup>nd</sup> year Small and Alternative schools with only composite scores (3yr average would not be available)

Letter Grade	Points Possible
A	90-100
B	80-89
C	70-79
D	0-69



# Thank you

Dr. Carrie L. Giovannone

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Arizona Department of Education  
Research & Evaluation